PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

| Applicant's or agent's file reference | FOR FURTHER | | see Form PCT/ISA/220 |
|---|---|-------------|--|
| 5005469.003PC1 | ACTION | as well | as, where applicable, item 5 below. |
| International application No. | International filing date (day/monti | vyear) | (Earliest) Priority Date (day/month/year) |
| PCT/US2004/036667 | 03/11/2004 | | 04/11/2003 |
| Applicant | | | |
| SUPERPOWER, INC. | | | |
| This International Search Report has bee according to Article 18. A copy is being t | | | nority and is transmitted to the applicant |
| This International Search Report consist | s of a total of 5 sho | eets. | |
| | y a copy of each prior art document c | | report. |
| | e international search was carried out eless otherwise indicated under this it | | sis of the international application in the |
| The internationa this Authority (R | | of a transl | ation of the international application furnished to |
| b. With regard to any nucle | otide and/or amino acid sequence | disclosed | in the international application, see Box No. I. |
| 2. Certain claims were for | und unsearchable (See Box II). | | |
| 3. Unity of invention is la | :king (see Box Ⅲ). | | |
| 4. With regard to the title, | | | |
| X the text is approved as s | ubmitted by the applicant. | | |
| the text has been establi | shed by this Authority to read as follo | ws: | |
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| 5. With regard to the abstract, | | | |
| the text is approved as s | ubmitted by the applicant. | | |
| | | | y as it appears in Box No. IV. The applicant ch report, submit comments to this Authority. |
| 6. With regard to the drawings, | | | |
| | published with the abstract is Figure | No1 | |
| X as suggested by | | | |
| as selected by the | is Authority, because the applicant fa | iled to sug | gest a figure. |
| | his Authority, because this figure bette | er characte | rizes the invention. |
| b none of the figures is to l | pe published with the abstract. | | |

International application No.

PCT/US2004/036667

Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

A tape-manufacturing system (10) for coating at least one tape substrate (28) such as, for example, for the manufacture of a high-temperature superconductor (HTS) conductor is disclosed. The tape-manufacturing system includes at least two electron beam (e-beam) deposition sources (12), at least one assist source (14) and, optionally, a controller (16). Each e-beam deposition source (12) may be in-process repairable. Each e-beam deposition source (12) is capable of to communicating an evaporant material with at least a portion of at least one tape substrate (28) to deposit a coating thereon. The at least one assist source (14) is capable of communicating a beam of a species to the coating. The controller (16) communicates with the at least two e-beam deposition sources (12) and the at least one assist source (14).

International Application No PCT/US2004/036667

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C23C14/56 C23C14/30 H01L39/24

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

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 $\begin{array}{lll} \mbox{Minimum documentation searched (classification system followed by classification symbols)} \\ \mbox{IPC 7} & \mbox{C23C} & \mbox{H01L} \end{array}$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

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| Υ | US 2002/081371 A1 (CHEONG DAN DAEWEON) 27 June 2002 (2002-06-27) page 4, paragraph 51; claims 1-44; figure 2 | 1-42 |

| Y Further documents are listed in the continuation of box C. | Patent family members are listed in annex. |
|---|---|
| Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed | 'T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention 'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone 'Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. '&' document member of the same patent family |
| Date of the actual completion of the international search | Date of mailing of the international search report |
| 24 February 2005 | 07/03/2005 |
| Name and mailing address of the ISA | Authorized officer |
| European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 | Teppo, K-M |

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| 4 | EP 0 468 488 A (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD) 29 January 1992 (1992-01-29) column 12, line 25 - line 55; figure 5 | 1-68 |
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